

*Feb 17*  
WHAT IS CLAIMED IS:

1. A method for managing incoming and outgoing calls when an endpoint has been placed on hold, comprising:

5 establishing a first call on a network between a first endpoint and a second endpoint, the first call including an outbound media stream communicated from the first endpoint;

10 detecting that the first call was placed on hold by the second endpoint;

15 establishing a second call on the network between the first endpoint and a third endpoint after detecting that the first call was placed on hold;

communicating the outbound media stream in the second call; and

mixing a first incoming media stream from the first call with a second incoming media stream from the second call for presentation to a user of the first endpoint.

20 2. The method of Claim 1, wherein mixing the first incoming media stream from the first call with the second incoming media stream from the second call for presentation to the user of the first endpoint comprises generating a mixed media stream that includes a first  
25 percentage of the first incoming media stream and a second percentage of the second incoming media stream.

30 3. The method of Claim 1, wherein communicating the outbound media stream in the second call comprises muting the outbound media stream in the first call.

4. The method of Claim 1, further comprising:  
detecting that the first call has been removed from  
on hold by the second endpoint; and  
communicating the outbound media stream in the first  
5 call after detecting that the first call was removed from  
on hold.

10 5. The method of Claim 1, wherein communicating  
the outbound media stream in a second call comprises  
receiving an indication that a button has been activated  
by the user at the first endpoint, the button operable  
to:

mute the outbound media stream in the first call;  
and

15 transfer the outbound media stream from the first  
call to the second call.

20 6. The method of Claim 1, wherein detecting that  
the first call was placed on hold by the second endpoint  
comprises the user receiving notification from a remote  
user at the second endpoint that the remote user is  
placing the first call on hold.

25 7. The method of Claim 1, wherein detecting that  
the first call was placed on hold by the second endpoint  
comprises receiving a signal from the second endpoint  
indicating that the first call was placed on hold.

8. The method of Claim 1, wherein detecting that the first call was placed on hold by the second endpoint comprises receiving a signal communicated from the second endpoint to a call manager via the network indicating  
5 that the first call was placed on hold.

9. The method of Claim 1, wherein mixing the first incoming media stream from the first call with the second incoming media stream from the second call for  
10 presentation to the user of the first endpoint comprises:

communicating the first and second incoming media streams to a call resource by a call manager coupled to the network;

15 mixing the first and second incoming media streams at the call resource to create a mixed media stream; and

communicating the mixed media stream from the call resource to the first endpoint by the call manager.

10. The method of Claim 1, wherein establishing the  
20 second call on the network between the first endpoint and the third endpoint after detecting that the first call was placed on hold comprises establishing the second call on the network in response to the user indicating a desire to place or receive the second call.

25 *Sub A17*  
11. The method of Claim 1, wherein the first endpoint performs the detecting, communicating and mixing steps.

12. The method of Claim 1, wherein:

establishing the first call on the network between  
the first endpoint and the second endpoint comprises  
receiving signaling information at the first and second  
5 endpoints from a call manager coupled to the network; and

detecting that the first call was placed on hold by  
the second endpoint comprises receiving a signal  
communicated from the second endpoint to the call manager  
via the network indicating that the first call was placed  
10 on hold.

13. The method of Claim 1, wherein mixing the first  
incoming media stream from the first call with the second  
incoming media stream from the second call for  
15 presentation to the user of the first endpoint comprises  
detecting that the first call was placed on hold by the  
second endpoint.

Sub A17  
14. A method for managing incoming and outgoing calls when a telephone call has been placed on hold, comprising:

establishing a first call on a network between a first telephone and a second telephone, the first call comprising a first media stream communicated from the first telephone to the second telephone and a second media stream communicated from the second telephone to the first telephone;

detecting that the first call was placed on hold by the second telephone;

establishing a second call on the network between the first telephone and a third telephone after detecting that the first call was placed on hold;

communicating the first media stream in the second call, the second call including a third media stream communicated from the third telephone to the first telephone; and

mixing the second media stream and the third media stream to generate a mixed media stream for presentation to a user of the first telephone.

15. The method of Claim 14, wherein the mixed media stream comprises a first percentage of the second media stream and a second percentage of the third media stream.

16. The method of Claim 14, wherein the first telephone comprises processing resources operable to mix the second and third media streams.

17. The method of Claim 14, wherein communicating the first media stream in the second call comprises muting the first media stream in the first call.

5 18. The method of Claim 14, further comprising:  
detecting that the first call has been removed from on hold by the second telephone; and  
communicating the first media stream in the first call after detecting that the first call was removed from  
10 on hold.

19. The method of Claim 14, wherein communicating the first media stream in the second call comprises receiving an indication that a button has been activated  
15 by the user at the first endpoint, the button operable to:

mute the first media stream in the first call; and  
transfer the first media stream from the first call to the second call.

20 20. The method of Claim 14, establishing the second call on the network between the first telephone and the third telephone after detecting that the first call was placed on hold comprises establishing the second call on  
25 the network in response to the user indicating a desire to place or receive the second call.

Sub A17

21. A telephony device, comprising:

a network interface operable to couple to a network;  
a transmit circuit coupled to the network interface;  
a receive circuit coupled to the network interface;

5 and

a control circuit coupled to the transmit and  
receive circuits, the control circuit operable to:

detect that a first call was placed on hold by  
a first remote endpoint, the first call including an  
outbound media stream communicated to the first remote  
endpoint and a first incoming media stream communicated  
from the first remote endpoint;

establish a second call on the network with a  
second remote endpoint after detecting that the first  
call was placed on hold by the first remote endpoint, the  
second call including a second incoming media stream  
communicated from the second remote endpoint;

instruct the transmit circuit to communicate  
the outbound media stream to the second remote endpoint  
in the second call; and

mix the first and second incoming media streams  
for presentation to a user.

22. The device of Claim 21, wherein the control  
circuit is further operable to generate a mixed media  
stream that includes a first percentage of the first  
incoming media stream and a second percentage of the  
second incoming media stream.

23. The device of Claim 21, wherein the control circuit is further operable to:

detect that the first call has been removed from on hold by the second endpoint; and

5        instruct the transmit circuit to communicate the outbound media stream in the first call after detecting that the first call was removed from on hold.

10        24. The device of Claim 21, wherein the control circuit instructs the transmit circuit to communicate the outbound media stream to the second remote endpoint in the second call in response to the user pushing a button located on the telephony device, the button operable to:

15        mute the outbound media stream in the first call;

and

20        transfer the outbound media stream to the second call.

25        25. The device of Claim 21, wherein the control unit detects that the first call was placed on hold by the second endpoint in response to receiving a media packet from the first remote endpoint that indicates the first call was placed on hold.

26. The device of Claim 21, wherein the control unit detects that the first call was placed on hold by the first remote endpoint in response to receiving a signal from a call manager that indicates that the first call was placed on hold.



~~the  
ish  
te  
pla~~

Sub A17  
28. Logic encoded in media for managing incoming and outgoing calls at a telephone when a telephone call has been placed on hold, the logic operable to perform the following steps:

5 establishing a first call on a network between a first endpoint and a second endpoint, the first call including an outbound media stream communicated from the first endpoint;

10 detecting that the first call was placed on hold by the second endpoint;

establishing a second call on the network between the first endpoint and a third endpoint after detecting that the first call was placed on hold;

15 communicating the outbound media stream in the second call; and

mixing a first incoming media stream from the first call with a second incoming media stream from the second call for presentation to a user of the first endpoint.

20 29. The logic of Claim 28, wherein mixing the first incoming media stream from the first call with the second incoming media stream from the second call for presentation to the user of the first endpoint comprises generating a mixed media stream that includes a first  
25 percentage of the first incoming media stream and a second percentage of the second incoming media stream.

30 30. The logic of Claim 28, wherein communicating the outbound media stream in the second call comprises muting the outbound media stream in the first call.

41

31. The logic of Claim 28, further comprising:  
detecting that the first call has been removed from  
on hold by the second endpoint; and  
communicating the outbound media stream in the first  
5 call after detecting that the first call was removed from  
on hold.

32. The logic of Claim 28, wherein communicating an  
outbound media stream associated with the first call in a  
10 second call comprises receiving an indication that a  
button has been activated by the user of the first  
endpoint, the button operable to:

mute the outbound media stream in the first call;  
and  
15 transfer the outbound media stream from the first  
call to the second call.

*Sub A17*

33. An apparatus for managing incoming and outgoing calls when an endpoint has been placed on hold, comprising:

means for establishing a first call on a network  
5 between a first endpoint and a second endpoint, the first call including an outbound media stream communicated from the first endpoint;

means for detecting that the first call was placed on hold by the second endpoint;

10 means for establishing a second call on the network between the first endpoint and a third endpoint after detecting that the first call was placed on hold;

means for communicating the outbound media stream in the second call; and

15 means for mixing a first incoming media stream from the first call with a second incoming media stream from the second call for presentation to a user of the first endpoint.